

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/838,424	04/19/2001	Frederic Bauchot	FR920000030US1	3573

7590 07/07/2004

David A. Mims, Jr.
IBM Corporation
Intellectual Property Law Dept.
11400 Burner Road - Internal Zip 4054
Austin, TX 78758

EXAMINER

STEVENS, ROBERT

ART UNIT	PAPER NUMBER
----------	--------------

2176

DATE MAILED: 07/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/838,424

Applicant(s)

BAUCHOT ET AL.

Examiner

Robert M Stevens

Art Unit

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☒ Claim(s) 1,2,4,6 and 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/24/2002.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

1. Claims 1-9 are pending in Application No. 09/838,424, entitled "Method and System in an Electronic Spreadsheet for Handling User-Defined Options in a Copy/Cut – Paste Operation", filed April 19, 2001, claiming benefit by virtue of foreign (French) application 00480057.9 filed with the European Patent Office in English on 7/13/2000.
2. The Office notes that the August 6, 2001 submission by Applicant failed to correct the drawing deficiencies referenced in the "Notice to File Corrected Papers", mailed 6/19/2001. See "drawings" section, below, and the enclosed Form PTO-948 (Notice of Draftsperson's Patent Drawing Review)."
3. Acknowledgement of IDS filed on 4/24/2002 is made, however, the Dupre article has not been considered because it is not in the English language (and no translation was provided).
4. Acknowledgement is made of a claim for foreign priority under 35 USC 119 (a)-(d) or (f).

Drawings

5. New corrected drawings are required in this application because drawings do not conform to the margin specifications set forth in 37 CFR 1.84(g). Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Specification

6. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

7. The abstract of the disclosure is objected to because: (1) it is not limited to one paragraph; (2) it exceeds 150 words in length; and (3) it merely reiterates the claims. Correction is required. See MPEP § 608.01(b).

8. The disclosure is objected to because of the following informalities:

- a. Page 16 line 12: "offer" should be "offers". Please correct all spelling/grammatical/etc. issues throughout the specification;
- b. Page 24 lines 4-8 define the same term ("D") multiple times (i.e., inconsistently).

Appropriate correction is required.

9. **All** non-patent literature relied upon for background information and cited throughout the specification (an example is found on page 3 lines 2-4) needs to be submitted via an IDS or as an appendix to the specification.

Claim Objections

10. Claims 1, 2, 4, 6 and 7 are objected to because of the following informalities:
 - a. Regarding claims 1, 2 and 4, the last limitation should be preceded by "and"; and
 - b. Regarding claims 6 and 7, a ";" should separate limitations within the body of the claim; and
 - c. All claims should end with a period.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

12. **Claim 8 is rejected under 35 U.S.C. 112, first paragraph** as a single means claim of undue breadth. *In re Hyatt*, 708 F.2d 712, 714-715, 218 USPQ 195, 197 (Fed. Cir. 1983)

13. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

14. **Claim 7 is rejected under 35 U.S.C. 112, second paragraph**, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 7, there is insufficient antecedent basis for the limitation "said interactive user interface". For the purpose of further examination, the Office will treat claim 7 as if it were dependent upon claim 6.

Claim Rejections - 35 USC § 101

15. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

16. **Claims 1-5, 8 and 9 are rejected under 35 U.S.C. 101** because the claimed invention is directed to non-statutory subject matter.

Claims 1-5 are directed to subject matter that is not tangibly embodied. The claims read on a mental process that could be carried out using paper and pencil. At best, the claimed invention reads on a computer program per se. Therefore, the claimed invention is directed to subject matter that is not within the technological arts.

Claims 8 and 9 are directed to software programs, per se, not tangibly embodied in a computer readable medium.

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. **Claims 1-4 and 6-9 are rejected under 35 U.S.C. 103(a)** as being unpatentable over the Aaron T. Blood authored spreadsheet entitled "sum_if", (downloaded from www.xl-logic.com/pages/formulas.html, published August 19, 1999, and hereafter referred to as "Blood") in view of Susan M. Shaw (editor), Using 1-2-3 Release 2.4, Special Edition, Que Corporation, (c) 1992, pp. 54-56, 77-79, 141, 142 and 270-274 (hereafter "Shaw"), and further in view of Applicant Admitted Prior Art (hereafter AAPA).

Regarding independent method claim 1, Blood discloses

A method of handling user-defined options during a copy and paste or a cut and paste operation within a multi dimensional spreadsheet comprising a plurality of cells identified by a cell address along each dimension, said method comprising the steps of:

** defining one or a plurality of combinations, each combination comprising one or a plurality of options; (screen capture 4A, showing cell A12 combination comprising the options of cells D2-D11. note that options are defined as boolean variables on page 16 of the specification)*

Blood, however, does not explicitly disclose:

** defining a source cell range and a destination cell range;*

Shaw discloses this limitation on page 160 in the first paragraph under the heading "Copying the Contents of a Range," especially noting the copy from (source) C6..C7 to (destination) D6..F6.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Shaw for the benefit of Blood because to do so would allow a user to copy a row or column of cells to multiple locations as taught by Shaw in the paragraph under the page 160 heading "Copying the Contents of a Range."

Blood, also, does not explicitly disclose:

** defining an operation to execute, either copy and paste, or cut and paste;*

Shaw discloses this limitation on page 160 in the first two sentences under the heading "Copying the Contents of a Range," especially noting the copy from (source) C6..C7 to (destination) D6..F6.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Shaw for the benefit of Blood because to do so

Art Unit: 2176

would allow a user to copy a row or column of cells to multiple locations as taught by Shaw in the paragraph under the page 160 heading "Copying the Contents of a Range."

Blood discloses:

for each defined option combination comprising one or a plurality of options, if at least one cell in the source cell range comprises a reference to said one or plurality of options,

**computing the content of each cell within the source cell range according to said one or plurality of options; (screen capture 4A, noting cell A12's formula utilizing the D column cells comprised of boolean "options")*

Blood, however, does not explicitly disclose:

**creating a version instance of the destination cell range;*

AAPA discloses this limitation at page 5 lines 3-5 and 8-9 of the Specification, noting the creation and storage of versions for a range.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of AAPA for the benefit of Blood in view of Shaw because to do so would allow a user to make style or data changes to cells and automatically update the version within that range as taught by AAPA on page 5 lines 6-7.

Blood, also, does not explicitly disclose:

** copying the source range of cells into said version instance*

Shaw discloses this limitation on page 160 in the first two sentences under the heading "Copying the Contents of a Range," especially noting the copy from (source) C6..C7 to (destination) D6..F6.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Shaw for the benefit of Blood in view of AAPA because to do so would allow a user to copy a row or column of cells to multiple locations as taught by Shaw in the paragraph under the page 160 heading "Copying the Contents of a Range."

Blood, also, does not explicitly disclose:

*when the last option combination is copied,
* clearing the source cell range if the operation is cut and paste.*

Shaw discloses that a cut and paste operation is well known in the art on page 63 in the paragraph under the heading "Transferring 1-2-3 Data with Microsoft Windows". By definition, it is inherent in a cut and paste operation that the source be removed (or cleared), as explained by the Microsoft Press Computer Dictionary, 3rd Edition, on page 126. Refer to the definitions of "cut" and "cut and paste".

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Shaw for the benefit of Blood in view of AAPA because to do so would allow a user to paste information into other applications as taught by Shaw in the paragraph under the page 63 heading "Transferring 1-2-3 Data with Microsoft Windows".

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Shaw and AAPA for the benefit of Blood because these references were all associated with a common field of endeavor, i.e., the computer spreadsheet art.

Regarding claim 2, which is dependent upon method claim 1, Blood discloses:

comprising the further steps of:

** assigning a name for each defined combination of options;
(screen capture 4A, refer to the cell D1 name "gate")*

However, Blood does not explicitly disclose:

** naming the version instance with the defined combination name;*

AAPA, though, discloses this limitation at page 5 lines 1-5, in which versions are created for a named range.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of AAPA for the benefit of Blood in view of Shaw because to do so would allow a user to make style or data changes to cells and automatically update the version within that range as taught by AAPA on page 5 lines 6-7.

Regarding claim 3, which is dependent upon method claim 1, Blood discloses:

comprising the preliminary steps of:

** defining each option as a boolean variable; (screen capture 4A, noting the cells D2-D11)*

** referencing said one or plurality of boolean variables in one or a plurality of cells. (screen capture 4A noting cell A12 and the formula bar, screen capture 5 noting cell B12 and the formula bar, and screen capture 6 noting cell C12 and the formula bar)*

Regarding claim 4, which is dependent upon method claim 1, Blood discloses:

wherein said step of computing the content of each cell within the source cell range according to one or plurality of options, comprises the further steps of:

** activating the one or plurality of boolean variables corresponding to the current option combination; (screen capture 4A cells D2-D5 have been "activated" or set to TRUE)*

** determining the content of each said cell with the source cell range depending on whether said one or plurality of boolean variables are activated or not. (Note the formula bars for cells A12, B12 and C12 in screen captures 4A, 5 and 6, respectively, which depend upon the activation state of boolean variables)*

Regarding claim 6, which is dependent upon claim 1, Blood does not explicitly disclose:

wherein said steps of assigning a name, changing the name, selecting a status value, updating the status value are executed by means of an interactive user interface.

Shaw, however, discloses this limitation on pages 54-55, especially the last paragraph on page 54 continuing through the second paragraph on page 55 where Shaw discusses text boxes for manipulating text (e.g., names or status values) and numbers (possible status value).

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Shaw for the benefit of Blood because to do so would help a user keep track of choices made and current settings as taught by Shaw on page 54 (refer especially to the first paragraph under the heading "The Interactive Dialog Boxes").

Regarding claim 7, which is dependent upon claim 1, Blood does not explicitly disclose:

wherein said interactive user interface comprises a dialog box displayed on a screen of a computer system.

Shaw, however, discloses this limitation on pages 54-55, especially Fig. 2.13.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Shaw for the benefit of Blood because to do so would help a user keep track of choices made and current settings as taught by Shaw on page 54 (refer especially to the first paragraph under the heading "The Interactive Dialog Boxes").

Regarding independent claim 8:

A system comprising means adapted for carrying out the method according to claim 1.

Claim 8 is substantially similar to independent method claim 1, and thus is likewise rejected.

Regarding independent claim 9:

A computer program comprising computer readable instructions adapted for carrying out the method according to claim 1.

Claim 9 is substantially similar to independent method claim 1, and thus is likewise rejected.

19. **Claim 5 is rejected under 35 U.S.C. 103(a)** as being unpatentable over the Aaron T. Blood authored spreadsheet entitled "sum_if", (downloaded from www.xl-

logic.com/pages/formulas.html, published August 19, 1999, and hereafter referred to as "Blood") in view of Shaw and AAPA, and further in view of Friedman et al., Problem Solving, Abstraction, and Design Using C++, 2nd Edition, Addison-Wesley, June 1997, pp. 165-167, 406-412, and 540-543 (hereafter "Friedman").

Regarding claim 5, which is dependent upon claim 1, the limitations of claim 1 have been previously addressed.

Blood, however, does not explicitly disclose:

comprising the further step of:

** setting the value of the boolean variable to one when the status value is "true", or*

** setting the value of the boolean variable to zero when the status value is "false".*

Friedman, though, discloses both of these limitations in the first sentence of page 167.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Friedman for the benefit of Blood in view of Shaw and AAPA because to do so would allow programmers to represent true and false values in a programming environment which has not implemented boolean data types as taught by Friedman on page 167 in the paragraph following the heading "If Type bool is Not Implemented on Your C++ compiler."

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Non-patent Literature

"Formulas and Logic Downloads", www.xl-logic.com/pages/formulas.html, downloaded by Examiner on 6/17/2004.

Blood, Aaron T., "cond_sum_array SpreadSheet", Jan 6, 2000 (www.XL-Logic.com).

Blood, Aaron T., "equal_val SpreadSheet", Aug 10, 2000 (www.XL-Logic.com).

Blood, Aaron T., "option_box SpreadSheet", Jul 16, 1999 (www.XL-Logic.com).

Blood, Aaron T., "same_or_diff SpreadSheet", Sep 1, 1999 (www.XL-Logic.com).

Blood, Aaron T., "sum_between_switches SpreadSheet", Sep 3, 1999 (www.XL-Logic.com).

Gold et al., The Complete Idiot's Guide to Microsoft Excel 97, 2nd Edition, Que Corporation, pp. 53-62 (©1998).

Granel, Vincent, "The Xxl Spreadsheet Project", Linux Journal, vol. 1999, issue 60es (April 1999), ISSN: 1075-3583.

(http://delivery.acm.org/10.1145/330000/327756/a27-linux_journal_staff.html?key1=327756&key2=5612137801&coll=ACM&dl=ACM&CFID=22784040&CFTOKEN=16685440).

Jamsa et al., Jamsa's C/C++ Programmer's Bible : The Ultimate Guide to C/C++ Programming, Jamsa Press, Houston, TX, sections 87106, 1161, 1162, 1228 and 1229 (© 1998).

Microsoft Press Computer Dictionary, 3rd Edition, Microsoft Press, Redmond, WA, 1997, pp. 126 and 299.

"Spreadsheet Programming: The New Paradigm in Rapid Application Development", Knowledge Dynamics, Inc., © 2002 (www.KnowledgeDynamics.com)

US Patent Application Publications

Prateley et al	US2001/0049699
Gelfand	US2002/0038303

US Patents

Koss	5,231,577
Young et al	5,280,575
Yarnell et al	5,359,729
Greif et al	5,371,675
Ammikrato et al	5,499,180
Narayanan	5,598,519
Chi et al	6,496,832

Art Unit: 2176

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert M Stevens whose telephone number is (703) 605-4367. The examiner can normally be reached on M-F 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (703) 305-9792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Robert M. Stevens
Art Unit 2176
Date: June 21, 2004

rms


JOSEPH FEILD
SUPERVISORY PATENT EXAMINER